

*The following passage was adapted from a chapter in Dr. James Fickle's book entitled Mississippi Forests and Forestry available from the University Press of Mississippi. Fickle was commended by the Mississippi Historical Society for significant contributions that increase the knowledge and awareness of our past through publications related to Mississippi history.*

# EARLY FORESTRY IN THE SOUTH AND IN MISSISSIPPI

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**I**n the early-twentieth-century southern lumber industry, timberland was acquired at relatively low prices, large mills were constructed, and the operations were based on getting a rapid cut to pay interest, dividends, and taxes and to depreciate the plant on the theory that everything—plant, railroad rolling stock, equipment,

town, and so on—would be liquidated when the last tree was cut. The prevailing attitude was summed up in 1919 by the general sales agent of the powerful Kirby Lumber Company, which operated in Texas and Louisiana. “As a lumberman,” said he, “my interest in forestry is nil. . . . When the lumberman of today saws the trees he owns and scraps his plant, his capital will enable him to become the banker, the ranchman, or the manufacturer of some other commodity.”<sup>1</sup>

Most lumbermen were not convinced that forest management made sense economically. J. B. White, one of the most influential leaders of the southern pine industry, delivered an address to the American Forestry Association in 1912 at Biltmore, the cradle of American forestry. But after paying homage to Vanderbilt, Pinchot, Schenck, and others associated with the Biltmore efforts, White concluded, “Conservation of natural resources comes only when it is discovered where and how it will

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**BY JAMES E. FICKLE**

pay to conserve. Until then there is no inducement to save and develop, for the effort would result in loss." The lumberman's standard cry was that forestry was not practical, while, as an editorialist in *American Forestry* magazine pointed out, "the claim is continually made by individual lumbermen and lumber journals that their business is conducted at a loss, that the only money made in it is by speculation in timberlands. If that is true lumbermen as a whole are a most impractical class." The editorial pointed out that the days of logging and lumbering the virgin forests were nearing their end. "The lumbermen of the future will be foresters," it said, "The difficulty now is that lumbering is still in the hands of men of the old idea . . . seeking large and quick returns. . . . But the great and quick profits of the old days of lumbering accessible virgin forests are gone. . . . It is necessary for [lumbermen] to readjust their view and to recognize forests as a resource in the perpetuation and permanent productiveness of which the whole people have an interest that must dominate any private interest."<sup>2</sup>

People hired in the 1930s and 1940s were among the pioneers in the development of southern forestry. As late as the 1930s the number of people trained and employed as professional foresters by private industry in the South was minuscule. [Inman F. "Cap"] Eldredge remembers that on graduation from the Biltmore Forest School in 1905, "there were very few openings in forestry. If you couldn't get into the Forest Service, you were stymied. The chances in industry were very few at that time." Richard Allen, a native Mississippian trained in forestry at the University of Georgia, said that when he went to work for the DeWeese Lumber Company of Philadelphia, Mississippi, "I was probably the first forester that they ever had in that part of Mississippi, and there just wasn't any forestry going on. Just about that period of time is when forestry got born."<sup>3</sup>

Allen also recalled that when Art Nelson went to work for Flintkote in Meridian, "I was still the only [forester] that was operatin' in that part of the world. . . . And I thought it was great that this land was sold to a company that had a forester. Nelson went to work for Flintkote in 1940, handling the forestry and timber procurement for a new wood fiber insulation board mill. Nelson later recalled that he was immediately impressed by the "incredibly fast timber growth" and the fact that "if nature was given just half a chance—a little fire protection—saving some seed trees—the forest would start on its way back." International Paper Company forester Buff Reaves was the first professional forester in Leake County, Mississippi. "I think Mr. Buff was Mr. Forester of Leake County, really," said Allen, "because there weren't any technical foresters there until IP moved in."<sup>4</sup>

Another early professional forester—and a native Mississippian—was J. R. Weston, who earned a forestry degree from the University of Washington in 1921 and became "as far as I know, the first native Mississippian to acquire a Forestry degree." Said Weston, "When I first graduated from forestry there was only one other Forestry graduate in Mississippi." Weston returned to Mississippi to work for the family-owned H. Weston Lumber Company. Also among the pioneering Mississippi foresters was James W. Craig, a native of Panola County, who earned a bachelor's of science degree in forestry from Purdue University in 1936 and a master's degree from the New York State College of Forestry at Syracuse in 1938. Craig served as chief of fire control for the Mississippi Forestry Commission after World



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*Richard C. Allen, forester for DeWeese Lumber Company, shown by the company's 40,000-acre Tree Farm. Allen was one of the early foresters hired by industry in the southern U.S.*

War II, became a consulting forester, and established a major forestry supply house in 1948. He also claimed to be, along with two other men, one of the first consulting foresters in the state. In 1952 Craig became the Mississippi state forester, serving until 1955, when he returned to his consulting business and forestry supply operation.<sup>5</sup>

One of the legendary early Mississippi foresters was not formally trained. P. N. "Posey" Howell was a native of Alabama and lived in Howison, Mississippi. For many years he was an employee of the L. N. Dantzler Lumber Company. By the early 1930s Howell had been employed by the Dantzlers for more than forty years and was serving as their land manager. Using wild stock, Howell planted one of the earliest pine plantations in Mississippi, and he was also famous for convincing company officials to leave seed trees. He called these trees "Mother Trees" and marked them with two-by-three-inch tags that read "This is a Mother Tree. DO NOT CUT" or a similar message. Ray Conarro of the Forest Service later remembered, "Usually these trees were spike top or so crooked that very little lumber could be cut from them."<sup>6</sup>

The stories about Howell are the stuff of legend. In the early years he traveled five counties on horseback selling the gospel of forestry and fire prevention. He followed a razorback hog for eight hours to learn that it uprooted more than five hundred longleaf saplings and prepared a placard showing that the hog destroyed more seedlings in a day than a man could plant in a

week. J. E. Bryan, who began working for Dantzler in 1945, was assigned to work with Howell because "he had all this information in his head. And he was one of the worst drivers in south Mississippi. He drove on the wrong side of the road and everything else, and Mr. Dantzler was convinced that Mr. Howell was going to run into a tree or somebody one of these days and all this knowledge would be gone. So he wanted me to devise some method of getting this information from Mr. Howell and putting it down on paper." Howell also toured the South with a U.S. Senate reforestation committee and argued that the best solution to the cutover land problem was reforestation, not conversion to agricultural use. He served on the first Mississippi Forestry Commission.<sup>7</sup>

These men and others like them shared a sense of mission about their work. They believed deeply in the need to manage the nation's forests, public and private, responsibly to perpetuate the country's timber supply. Arthur W. Nelson Jr. remembered that as he was finishing forestry school at the University of Idaho in the 1930s, "I was . . . told by a number of people that if you really wanted to accomplish something in your lifetime in forestry, the place to head for was the South. At that time Yale Forestry School had an outstanding southern program in which they operated on the lands of the Crossett Lumber Company . . . and the Urania Lumber Company. . . . My interest in coming South prompted me then to apply to Yale." As [Elwood L.] Demmon put it, "Most of us went into forestry because we liked the work and we liked to be doing something that would benefit the country."<sup>8</sup>

All of these professionals did not share a single approach to implementing responsible policies on the timberlands they managed. In fact, R. D. Forbes, director of the U.S. Forest Service Experiment Station at New Orleans, emphasized this fact in a speech before the Southern Pine Association annual meeting in 1921: "One point cannot be overemphasized at the outset. If you insist that we put down in black and white requirements which will apply to all operations of the Southern Pine belt . . . you must expect that the best land for timber growing will be penalized on account of the poorest land. Forestry is not, and never will be, something which can be intelligently applied from a swivel chair in an office. The only place to practice forestry is in the woods. Conditions on one type of soil may be most unfavorable to reforestation, while conditions on another soil may be extremely favorable. If you ask us to name measures which will secure the natural reforestation of the entire pine region, which includes bad conditions as well as good, you must not complain if those measures are more than is really necessary to secure natural reforestation under the best conditions."

Forbes went on to summarize the requirements for keeping southern pinelands "reasonably productive" as follows:

1. That four seed trees of longleaf pine, or two seed trees of any other kind of pine, be left standing and uninjured on each acre of land cut over.
2. That all tops and slash left in logging be removed to a distance of 20 feet from the seed trees, unless twice the prescribed number of seed trees is left per acre, in which case the slash may be left untouched; the slash to be burned the first winter, or carefully protected by patrol and fire lines for five years.

3. That the cutover lands, when once reseeded, be rigidly protected from fires at all seasons of the year for 3 years in the case of longleaf pine, and for 10 years in the case of other pines, after which less careful protection will be sufficient.
4. That wherever razor back hogs are sufficiently numerous to keep longleaf pine seedlings from reforesting the land the hogs be excluded, unless the land will reforest to other kinds of pine.

Part of Forbes's prescription had long been accepted. As early as 1880 in his "Report on the Forests of North America" for the tenth census, Professor Charles S. Sargent of Harvard College had noted that "fire and browsing animals inflict greater permanent injury upon the forests of the country than the ax, recklessly and wastefully as it is generally used against them."<sup>9</sup>

The activities of the Yale Forestry School and of a few pioneering lumber companies inspired foresters and other lumbermen across the South to believe that there might be a profitable future in regeneration and selective cutting of their timberlands. The later arrival of pulp and paper companies on the scene made the potential even more attractive. These people were conservationists by some definitions, but they were definitely not preservationists or environmentalists in the modern sense. They sought simply to work toward a continuing supply of timber as an economic resource, not for recreational use or for scenic or biolog-



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*The Yale Forestry School conducted field programs in the south. Here a student performs surveying exercises on Urania Lumber Company lands.*





*Regarded as a foolish visionary, Henry E. Hardtner of Urania Lumber Company purchased cutover lands in the south as early as 1904–1905.*

ical preservation. Their efforts eventually contributed to acceptance of the multiple-use concept, but other uses were always subordinate to sustaining the forests as suppliers of timber. Companies that practiced conservation did so because they believed it would pay.<sup>10</sup>

Several southern lumbermen and firms stand out as pioneers in the realization that their timberlands might be held and regenerated profitably. First was Henry Hardtner of the Urania Lumber Company in north-central Louisiana. Hardtner's was not a big operation by the standards of the industry giants, but his hands-on approach, close to the lands and the mill, produced significant long-term dividends for the South. Hardtner reacted strongly against the efforts of many lumber companies to unload their land for agricultural usage once it had been cut over. Hardtner derided the Southern Pine Association's 1917 cutover land conference as "a big scheme to try to sell land that was not worth while for agriculture at all," and he later charged that the entire plan was "just a skin game to fool people in the north and west, to think that they could make a whole lot of money out of poor lands." Hardtner was absolutely correct in his negative assessment of the suitability of cutover lands for agricultural use. A 1920 description of farming on cutover lands is typical: "Anyone who has ever seen the cut over pine land, where the people are trying to farm ought to realize the sadness of this situation. I don't know which is the sadder, the devastation of pine lands, or the people who are trying to live on them. Year after year these people go on . . . and try to farm on this land. It is so poor that it will scarcely grow peanuts, but still they go on there."<sup>11</sup>

At the time Hardtner first became interested in the regeneration of his lands, virtually no scientific information was available regarding the reproductive abilities of southern pine, so as he later recalled, "At first I had to pioneer every step in my investigation of the reproduction of longleaf pine. I thought it would take 60 to 100 years to grow a merchantable crop. No one could tell me what was possible, no yield tables . . . were then available. I had to work out the problem for myself." The fact was that the "virgin" forest that had been harvested by the lumbermen of the "cut out and get out" era was not a typical forest. Thomas C. Clark observed, "The fact that ring counts made on stumps in this area revealed excessively long life spans did not necessarily indicate that it took so much time to produce a marketable tree." Or, as Nelson later noted, the trees harvested by the cut-out-and-get-out lumbermen "consisted of 200-300 hundred-year-old survivors in a wild and uncared-for forest. This gave rise to the idea that no one could wait that long for another crop of trees to mature."<sup>12</sup>

Hardtner implemented three policies to restore his lands. First, he tried to control fires and hogs; second, he enforced a diameter limit on the trees to be harvested; and third, he insisted that seed trees be left on each acre logged. Hardtner was regarded as a foolish visionary by many of his more practical contemporaries. He later recalled ironically that "you didn't hear any of them talking about putting timber back on the land did you?" Nonetheless Hardtner had faith in what he was doing, with the best evidence



U.S. FOREST SERVICE PHOTO #267657

*Austin Cary, shown here in a Florida pine forest in 1932, had a great skill in making technical forestry procedures understandable to landowners.*



*By implementing hog and fire protection, the Great Southern Lumber Company was able to encourage young natural regeneration (in this case Slash pine) in cutover areas (1925).*

provided by the fact that he was purchasing additional cutover lands as early as 1904 and 1905. Hardtner's program was not based on romanticism; he believed that there was a sound economic basis for his reforestation efforts. He also was instrumental in the establishment of the Louisiana Forestry Commission, and his timberlands became the sites for annual summer camps and experimentation by the Yale University School of Forestry. Hardtner did a great deal to provide the informational foundations on which others would later build.<sup>13</sup>

One of the first products of Hardtner's influence occurred in May 1920. He invited officials of the Great Southern Lumber Company of Bogalusa, Louisiana, to visit Urania to get a firsthand look at what he was doing. Colonel W. L. Sullivan, general manager of the Great Southern, had already traveled to Norway and been influenced by the forest management he saw there. He was obviously impressed by what he observed in Urania as well, for on the trip back to Bogalusa he announced to members of the New Orleans press that his company was planning to implement a comprehensive reforestation and conservation program. Whether it was the Norwegian experience or the trip to Urania or both that made the difference is a matter for speculation. In any case, [Austin] Cary was brought in for consultation.<sup>14</sup>

Cary was a forester, and he came South in 1917 as a logging engineer for the U.S. Forest Service. Cary was struck by the backwardness of southern forest practices, and he hoped to promote sound forestry among the South's large and small landowners. He tirelessly toured southern lumber operations and convinced the lumbermen to experiment on small plots to prove the efficacy

of improved forest practices. Cap Eldredge remembered that Cary "did a tremendously fine job in getting interest started. He didn't convince anybody to the extent that the day after he left they went out and did something, but he was a persistent old New England Yankee and he'd come back talking all the time. They liked him and enjoyed him. . . . He generated a lot of interest that grew little by little and men commenced to do something . . . but the thing that made it all blossom was that the price of land and timber went up under the impact of the pulp development. Then it became economically possible and profitable to hold land for successive crops of timber."<sup>15</sup>

Elwood L. Demmon recalled that Cary "could do better than almost anybody in interesting lumbermen in forestry. He really had a knack for taking businessmen out into the woods and showing them how trees grew and instilling in them the fundamentals of forestry. He always carried an axe with him and did not hesitate to cut down a tree just to illustrate its growth rate by counting the annual rings. Observations such as this made a deep impression on many of these old-time lumbermen, and they had great respect for old Dr. Cary." Demmon concluded,

*"I would say that of all the foresters who have worked in the South, he probably had more influence with the lumbermen, selling them forestry, than any other technical forester. Dr. Cary was a technical forester, and he was also a very practical man and knew how to speak the language of the lumberman. . . . Dr. Cary did a lot of good in getting forestry started in the South. . . . He would barge right in to a lumberman's office. He wouldn't spend*



*time with any of the underlings; he'd just go to the general manager or company president and tell him that he ought to be interested in the future of his timberlands. He would take these men right out into the woods and cut down a tree or two and show them how rapidly these trees were growing and that forestry was not such a long-time proposition as they might have thought. Many a hard-headed lumberman became interested in forestry by just such tactics. . . . Dr. Cary would get them right out in the woods and show them on the ground. He spoke their language."*<sup>16</sup>

Frank Heyward, former general manager of the Southern Pulpwood Conservation Association, summed up Cary's contribution: "Austin Cary dedicated the last 19 years of his life to awakening southern wood-using industries to the possibilities of timber growing. He was successful to a remarkable degree, and his accomplishments in the fields of fire protection and forest management comprise the greatest contribution by any single person to southern forestry."<sup>17</sup>

Meanwhile in Bogalusa, Red Bateman, chief ranger for Great Southern, designed a dibble and planted some twenty thousand acres of longleaf seedlings. Working with primitive tools and both planting and direct seeding, Great Southern also began implementing hog and fire protection. Great Southern produced what may have been the first commercial hand-planted forest in the South. At first the company went out and dug up wild plants for its plantations, but it then established a nursery to provide seedlings. The company's seedlings suffered from fires, and many of the planted trees died, but the effort continued, and as Cary remarked, if the Great Southern plantations survived, "forestry was fool proof in the South." Great Southern also owned several hundred thousand acres of timberland in Mississippi.<sup>18</sup>

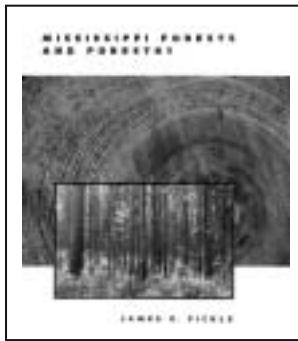
Another pioneering firm in the implementation of a sustained-yield program was the Crossett Lumber Company in Arkansas. The Crossett story is legendary within the southern forest-products industry. As former Mississippi state forester Richard Allen remembered,

*Crossett was one of the largest mills in the country. And they were fixin' to shut that big plant down. And so the board members came down to Crossett, Arkansas, to see the last logs bein' sawed and to decide what to do. . . . [T]his director they said, walked up on the green chain where the logs were bein' pulled up to the saws, and he saw a log comin' up there about 14 inches in diameter. The rings were pretty far apart. And right ahead of it had been a log that was just real dense. . . . And he stopped it, and he said, "I wanta' know where this log came from and where this came from." And he counted the rings and this one here was 28 years old . . . this one over here was 60 sumpin years old. And he said, "What's goin on here?" . . . They . . . found some more logs like that on the yard and they said that logger that's bringin' these in, came from, and they gave the location. . . . [T]hey went out there and they had had a cyclone through that site some 25 years before then. And there was plenty of seed sources, it had blown these trees down and opened up the forest and it reseeded into this young growth, and so this 25 year old cruiser said, "All we've gotta do is reseed it. You don't just go in and cut it, and burn it, and get out and let it go back for taxes." And that's when Crossett became what it is today."*<sup>19</sup> □

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*Great Southern also produced what may have been the first commercial hand-planted forest in the South. Here, a Great Southern Lumber Company crew is planting one-year old Slash pine seedlings on cutover land in 1925. The seedlings are being planted in plowed furrows near Bogalusa, Louisiana with a planting bar designed by Red Bateman.*



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**NOTES** [some notes cited here are incomplete as they occurred in chapter 6 of the book; full citations are available in the book]

1. "The Lumber Industry Speaks," *Journal of Forestry* 37 (November 1929): 759.
2. J. B. White, "Lumbermen and Conservation," *American Forestry* 19 (April 1913): 259; "Is Forestry Practical?" *American Forestry* 17 (July 1911): 425-26.
3. *Voices from the South: Recollections of Four Foresters* (Santa Cruz, Calif.: Forest History Society, 3; Richard Allen, interview by author, August 31, September 2, 1989.
4. Richard Allen, interview; Art Nelson, "Art, How'd You Get in This Business Anyway?" *Tree Talk* 19 (fall 1997): 50; A. W. Nelson Jr., "A Story Is to Be Told," *The Unit* 100 (March 1964): 5; Jean Firestone, "Art Nelson: A Shining Light for Forestry," *Forestry Forum* 6 (summer 1992): 22.
5. Weston, "History of Forestry," 3, 9; James W. Craig to Jason N. Kutack, July 5, 1988, MFA Records, box 50; Art Nelson, "Focus on Pioneer Forestry Consultants," *Tree Talk* 15 (summer 1993): 14; "The History of Forestry in Mississippi," unpublished manuscript in MFC Files, 24, 29. The authorship of this manuscript is cloudy. Some Forestry Commission employees say it was begun in the 1960s by MFC information specialist and pilot Bob Church and was continued for the next few years by several staff members. From 1975 until 1984 it was written by William Colvin, the MFC's information and education director. All copy was approved by the state foresters who served during the period covered by the document. However, materials in the Dick Allen File of the MFA Records indicate that the portion covering the years from 1926 through 1971 was done by Church and the period from 1972 through 1982 by longtime MFC secretary Bobbie Jean Dickinson. Most of the H. Weston Lumber Company records, including company materials and family papers, are in the Special Collections, J. D. Williams Library, University of Mississippi, Oxford. Most of the early materials were destroyed in a fire at the north mill, company offices, and store at Logtown on October 26, 1900. From 1912 on the records are fairly complete. By the late 1940s the company's operations had virtually ceased, and in the early 1950s the holdings were sold to IP (Joseph S. Weston to Steve Corbitt, July 10, 1997, copy in possession of author; "H. Weston Lumber Company," description of the Weston Lumber Company Records).
6. Weston, "History of Forestry," 8-9; Ray M. Conarro, *The Beginning: Recollections and Comments* (n.p.: U.S. Forest Service, Southern Region, 1989), 8; "History of Forestry in Mississippi," 2-3.
7. Pittman, "Mississippi's Forests of Yesteryear," 25; Arthur W. Nelson Jr., "Posey Howell: Mississippi's First Forester," *Tree Talk* 9 (fall 1987): 9; J. E. Bryan Jr., "Forest History," 11, MFA Records. For an excellent photograph of Posey Howell and a slightly different version of the wild hog story, see "The Father of Mississippi Forestry," in *The Great Southern Tree Crop: A Report to the People of the South for the Year 1947—by Southern Kraft Division of International Paper Company* (n.p.: IP, n.d., copy in MFA Records), 7.
8. Arthur W. Nelson Jr., interview by Wayne Flynt and Warren Flick, November 8, 1978, copy in possession of author; *Voices*, 128. Joseph E. McCaffrey, who was in charge of woodlands for the Southern Kraft Division of IP and who was a company vice president, tells a similar story. McCaffrey attended the New York Ranger School in 1915 and 1916 said that one of his professors told him, "The Southern pine region one day will have all the paper industry or a large portion of it. They've got climate, rainfall and soil. If I were you, I'd go South" (Mauder, "Go South, Young Man," 3).
9. R. D. Forbes, "Essential Requirements for the Practice of Forestry," in *Protection for Buyers of Pine: Annual Meeting Report of the Southern Pine Association, 1921* (New Orleans: Southern Pine Association, 1921), 155-56, copy in SPA Records, box 85B; Sargent, *Report*, 490.
10. William B. Greeley, "The Business of Growing Trees," in *A Decade of Service: Official Report of the Tenth Annual Meeting of . . . the Southern Pine Association . . . March 24 and 25, 1925*, 69, SPA Records; Thomas R. Cox, "Stewardship," 192; William G. Robbins, *Lumberjacks and Legislators: Political Economy of the U.S. Lumber Industry, 1890-1941* (College Station: Texas A&M University Press, 1982), 10-12, 17. In 1910 R. S. Kellogg of the U.S. Forest Service said, "The conservationist is no idle theorist. He believes in use, but not in abuse. Granted that the forest must be made of the greatest possible use, but that this use must not be destructive, that we may cut the trees from year to year, but that the forest must exist forever" ("Perpetuating the Timber Resources of the South," *American Forestry* 16 [January 1910]: 6). For a brief overview of the background and development of these pioneering efforts, see Clepper, "Industrial Forestry," 12-14; and Barber, "Forestry," 505-11. For an overview of the management of U.S. industrial forests during the late nineteenth and early twentieth centuries, see Michael Williams, "Industrial Impacts," 108-21.
11. Fickle, *New South*, 242-43; *Proceedings of the Second Southern Forestry Congress* (Durham, N.C.: Seeman Printery, 1920), 70. For a brief description of the development of industrial forestry in the South, see *Southern Forestry*, 55-61. The forestry activities of Hardtner at Urania, the Great Southern in Louisiana, and Crossett in Arkansas are treated concisely in Robert S. Maxwell, "The Impact of Forestry on the Gulf South," *Forest History* 17 (April 1973): 31-35.
12. Clark, *Greening*, 55; Clark, "Impact of the Timber Industry," 161; Art Nelson, "Sustainable Forestry," *Tree Talk* 18 (spring 1996): 30.
13. Fickle, *New South*, 243, 246-47; Stanley Todd Lowry, "Henry Hardtner, Pioneer in Southern Forestry: An Analysis of the Economic Bases of His Reforestation Program" (master's thesis, Louisiana State University, 1956), 57-72. See also E. L. Demmon, "Henry Hardtner," *Journal of Forestry* (December 1955): 885-86.
14. Fickle, *New South*, 253; Clepper, *Professional Forestry*, 238; Clark, *Greening*, 57; Philip C. Wakeley, "The Adolescence of Forestry Research in the South," *Journal of Forest History* 22 (July 1978): 141-42. Charles Goodyear's book on Bogalusa mentions Hardtner's work at Urania but does not discuss Sullivan's trip to inspect Hardtner's operations (*Bogalusa Story* [Buffalo, N.Y.: privately printed, 1950]). For another account of the activities of Hardtner, Great Southern, and other pioneering Louisiana forestry leaders, see Edward F. Kerr, "Louisiana's State Story, Part 1," *American Forests* (April 1953): 24-26, 55; and Edward F. Kerr, "Louisiana's State Story, Part 2," *American Forests* (May 1953): 22-24, 47. For a popular account of Great Southern, see Jerry L. Myrick, "History of the Great Southern Lumber Company," *Bogalusa (Louisiana) Daily News*, January 24-February 12, 1991. An illustrated contemporary description of the company and its Bogalusa facilities appears in "The Largest Lumber Manufacturing Proposition in the World," *American Lumberman* (July 4, 1908): 53-68. A good account of Great Southern's early years, including its reforestation efforts, appears in Curtis, "Early Development," 347-68. Curtis says that the Goodyears originally planned to build their mill on Ten Mile Creek near Columbia, Mississippi, but were deterred by difficulty in purchasing land and by the "more important" fact that "Mississippi laws prohibited the establishment of a corporation with real property value of more than one million dollars" (351-52).

15. Roy R. White, "Austin Cary, the Father of Southern Forestry," *Forest History* 5 (spring 1961): 3–4; *Voices*, 41. See also Roy Ring White, "Austin Cary and Forestry in the South" (Ph.D. diss., University of Florida, 1960).
16. *Voices from the South: Recollections of Four Foresters* (Santa Cruz, Calif.: Forest History Society, 1923–24).
17. Frank Heyward, *History of Industrial Forestry in the South: William B. Greeley Lectures in Industrial Forestry* (Seattle: University of Washington College of Forestry, 1958), 28.
18. P. M. Garrison, "Building an Industry on Cut-Over Land," *Journal of Forestry* 50 (March 1952): 185–87; Croker, *Longleaf Pine*, 12; Zebulon White, interview. A dibble is a spadelike tool used to prepare planting holes for seedlings. The blade is of heavy, sharp steel, about three or four inches wide, and about six inches long. The dibble is stuck in the ground, and when it is removed, the seedling is placed in the opening. Another dibble insertion presses the soil against the root. Hand planting was often done by crews, with a man operating the dibble and a boy placing the seedlings in the ground. Great Southern used crews of twenty with a foreman for each crew. The company would assign as many as fifteen to twenty crews to a job, and each crew could plant about forty acres a day, with roughly one thousand seedlings to each acre (Curtis, "Early Development," 365).
19. Richard Allen, interview. For a brief description of the development of industrial forest management in the South and particularly the work of the early lumber companies and pulp and paper operations that

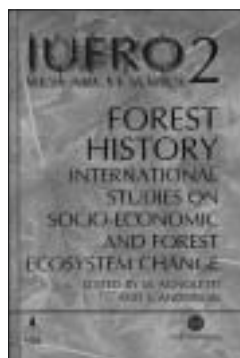
pioneered in the adoption of enlightened practices, see William M. Bailey, "Industry's Effect on Forest Management," in *Proceedings, Society of American Foresters Meeting, Washington, D.C., 1960* (Washington, D.C.: Society of American Foresters, 1960). Bailey was an IP employee. Other materials dealing with Crossett include R. R. Reynolds, *The Crossett Story: The Beginning of Forestry in Southern Arkansas and Northern Louisiana*, General Technical Report SO-32 (New Orleans: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station, 1980); S. V. Sihvonen, "Utilization—The Key to Better Forestry at Crossett," *Proceedings of the Society of American Foresters Meeting, "Forestry Faces Forward," Memphis, Tenn., 1956* (Washington, D.C.: Society of American Foresters, 1956), 138–41; James B. Baker, "The Crossett Farm Forestry Forties after Forty-One Years of Selection Management," *Southern Journal of Applied Forestry* 10 (November 1986): 233–37; R. R. Reynolds, "Twenty-Nine Years of Selection: Timber Management on the Crossett Experimental Forest," Research Paper SO-40 (New Orleans: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station, 1969); R. R. Reynolds, "Eighteen Years of Selection: Timber Management on the Crossett Experimental Forest," Technical Bulletin 1206 (New Orleans: U.S. Department of Agriculture, Forest Service, 1959); and R. R. Reynolds, "Fifteen Years of Management on the Crossett Farm Forestry Forties," Occasional Paper 130 (New Orleans: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station, 1953).

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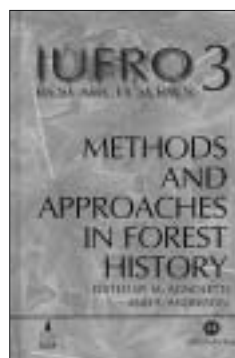


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